

Amendments to the Claims:

14. (canceled)

15. (canceled)

16. (canceled)

17. (currently amended) A method of data hiding comprising the steps of:
providing an encryption key;
generating an encryption sequence based on the encryption key;
providing a carrier signal that conveys information unrelated to the encryption
key;
embedding the encryption sequence into the carrier signal;
transmitting the carrier signal including the embedded encryption sequence to a
receiving location,
extracting the encryption sequence from the composite signal at the receiving
location, and
deciphering the encryption sequence to obtain the encryption key at the receiving
location.

19. (canceled)

20. (currently amended) A method of data hiding comprising the steps of:

embedding an encrypted message into a first portion of a carrier signal; and
embedding message extraction information into a second portion of the carrier
signal for extracting the encrypted message from the first portion of the carrier signal.
The method of claim 19, wherein the step of embedding an encrypted message includes performing an exclusive-OR of the encrypted message with the first portion of the carrier signal.

26. (canceled)

29. (currently amended) A data hiding apparatus comprising:
an encryption sequence generator configured to generate an encryption sequence based on an encrypting key;
an encrypted message generator configured to generate an encrypted message based on the encryption sequence and an input message; and
an encrypted message embedder configured to embed the encrypted message into a carrier signal by replacing a first LSB plane of the a digital image with information based on a second LSB plane of the digital image and performing an exclusive-OR of the encrypted message with the second LSB plane of the digital image.